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ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE P/3255-43 09/598,010 06/20/2000 Antoine Bastard EXAMINER 2352 05/17/2004 OSTROLENK FABER GERB & SOFFEN LAZOR, MICHELLE A 1180 AVENUE OF THE AMERICAS ART UNIT PAPER NUMBER NEW YORK, NY 100368403 1734

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		T	T		
		Application No.	Applicant(s)		
Office Astinus Communication		09/598,010	BASTARD ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Michelle A Lazor	1734		
Period fo	The MAILING DATE of this communication apports. Or Reply	pears on the cover sheet with the o	correspondence ad	dress	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)	Responsive to communication(s) filed on 16 April 2004.				
2a)⊠	☐ This action is FINAL. 2b)☐ This action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposit	ion of Claims				
4)⊠	Claim(s) 18-39 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 18,20,27-30 and 36 is/are rejected. Claim(s) 19,21-26 and 31-35 is/are objected to.				
Applicat	ion Papers				
9)[The specification is objected to by the Examine	er.			
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority (under 35 U.S.C. § 119				
а)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National :	Stage	
Attachmen	t(s)				
_	e of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)		
3) 🔲 Infori	ee of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	-152)	

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The definition of "reelable" is not clear. For the purpose of examination, reelable is understood to mean "able to be wound".

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 18, 20, 27, 28, 30, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman (U.S. Patent No. 5368670) in view of Gibbs et al. (U.S. Patent No. 5447179), Ziu (U.S. Patent No. 4786088) and Pool et al. (U.S. Patent No. 6402201).

Regarding Claims 18 and 20, Kauffman discloses a rigid double-walled pipe comprising an inner flow pipe with a hollow passage, an outer carrier pipe which surrounds the flow pipe, and a separating structure between the inner and outer pipes which define an annular space therebetween (Figures 2 and 3), the method comprising installing a plurality of sealing blocks axially spaced apart on the outer wall of the flow pipe, installing the outer carrier pipe around the flow pipe and the sealing blocks, the sealing blocks having radially opposite faces and being dimensioned to be in contact respectively with the outer and inner walls of the flow pipe and the carrier pipe to define at least one sealed annular regions within the space between the flow pipe

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and the carrier pipe and filling the annular space with a foam (column 5, line 33 – column 6, line 11); and spacing the sealing blocks so that the axial length of the annular region is in the range of 0.5 - 2 times the external diameter of the carrier pipe (column 10, lines 9 - 15 and column 10, line 65 - column 11, line 5), but does not specifically disclose the double-walled pipe to be reelable, as well as selecting the material of the inner pipe and outer pipe to be reflective of the properties of the fluid to be transported and the intended environment of use, respectively; and finally does not specifically disclose a curable compound being placed in the annular region, and curing the compound. However, Gibbs et al. disclose manufacturing a reelable double-walled rigid pipe (Abstract; Figure 1; column 11, lines 9 - 12); Ziu discloses selecting the material of the inner pipe and outer pipe to be reflective of the properties of the fluid to be transported and the intended environment of use, respectively (column 5, lines 43 - 51); and Pool et al. disclose a curable compound being placed in an annular region, and curing the compound (column 4, lines 26-62). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a reelable double-walled rigid pipe for transportation purposes; it would have been obvious to select the material of the inner pipe and outer pipe to be reflective of the properties of the fluid to be transported and the intended environment of use, respectively, to reflect the required performance characteristics and avoid any potential leaking from harsh chemicals (column 5, lines 44 - 48); and finally it would have been obvious to use a curable compound being placed in an annular region, and curing the compound since it is well known and conventional to use a curable foaming compound and curing the compound, such that the process of laying the pipeline is not inhibited (column 4, lines 56 - 57).

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Regarding Claims 27, 30, and 36, Pool et al. is considered to disclose an epoxy resin or a polymer (column 4, lines 52 - 57) to fill the empty annular space that is curable at room temperature and has a pot life range of a few minutes to a few weeks (column 5, lines 4 - 17). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use an epoxy resin or a polymer in the annular space since it is quick hardening (column 4, lines 56 - 57); and it would have been obvious to cure the polymer or compound at room temperature and have a pot life of a few minutes to a few weeks to simplify the method of filling the annular space, requiring less time and machinery to adequately fill the annular space.

Regarding Claim 28, Pool et al. disclose the steps of providing an injection orifice through the wall of the carrier pipe into the region and injecting the curable compound into the region through the orifice (Figures 2-4; column 4, lines 27-34). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide an injection orifice through the wall of the carrier pipe into the region and inject the curable compound into the region through the orifice to facilitate filling the annular space with the curable compound.

4. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman, Gibbs et al., Ziu, and Pool et al. as applied in Claim 28 above, in view of Stevens (U.S. Patent No. 5474721).

Regarding Claim 29, Kauffman, Gibbs et al., Ziu, and Pool et al. disclose all the limitations of Claim 28, but do not specifically disclose using a thermosetting compound. However, Stevens discloses using a thermosetting compound in an annular region (column 2, line 49 – column 3, line 20). Therefore it would have been obvious to one of ordinary skill in the

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art at the time of the invention to use a thermosetting compound as an alternative curable compound.

Allowable Subject Matter

- 5. Claims 19, 37, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. There was no reference in the prior art search that disclosed, taught, or suggested the step of winding the pipe on a reel after placing and curing the compound.
- 6. Claims 21 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. There was no reference in the prior art search that disclosed, taught, or suggested the sealing blocks comprised of radially deformable material which projects radially when compressed axially and which is deformable to the shape of the respective inner and outer walls of the carrier pipe and the flow pipe. The sealing blocks in the prior art search were found to be rigid, and not capable of being deformed as shown by Kauffman (Figures 2 and 3).
- Claims 34, 35 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. There was no reference in the prior art search that disclosed, taught, or suggested the steps of reeling the rigid pipe onto a reel after assembly but before injecting the curable compound into the annular region, unreeling the rigid pipe from the reel, introducing the curable compound into the annular region, and heating the annular region.

 Although heating of the curable compound in an annular region in a double-walled pipe was

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found in the prior art search as shown by Stevens (Figure 1D; column 2, lines 63 - 67 and column 3, lines 14 - 20), there is no motivation to reel a rigid pipe onto a reel after assembly but before injecting the curable compound into the annular region. Kauffman disclose assembling the entire pipe at one time (column 6, line 31 -column 7, line 29).

Response to Arguments

8. Applicant's arguments with respect to claims 18 – 39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hollis (U.S. Patent No. 5402831) disclose using different material for the inner and outer pipes of a double-walled pipe (column 3, lines 15 18).
- 10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 571-272-1232. The examiner can normally be reached on Mon - Wed 6:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mulle Kewell Jy MAL 5/5/04

MICHAEL COLAIANNI
PRIMARY EXAMINER